CLAIMS

1. A semiconductor component in which the active junctions extend perpendicularly to the surface of a semiconductor chip substantially across an entire thickness thereof.

2. The semiconductor component of claim 1, wherein the contacts with the regions to be connected are provided by conductive fingers substantially crossing an entire region with which a contact is desired to be established.

3. The semiconductor component of claim 2, wherein the conductive fingers are metal fingers.

4. The semiconductor component of claim 1, of multicellular type, wherein the junctions are formed of several cylinders perpendicular to the main substrate surfaces.

5. A diode according to claim 1, comprising an alternation of regions of a first conductivity type and of a second conductivity type extending across the entire substrate thickness, the regions of a first type being crossed by conductive fingers connected to a metallization extending over an entire surface of the substrate, and the regions of the second type being crossed by conductive fingers connected to a metallization on the other substrate surface.

6. The diode of claim 5, formed in an N-type semiconductor substrate, wherein the conductive fingers penetrating into the N-type regions are surrounded with heavily-doped N-type regions.

7. A bipolar transistor according to claim 1, alternately comprising a region of a first conductivity type, a region of a second conductivity type, and a region of the first conductivity type, each of these regions extending across the entire thickness of the substrate and being in contact with at least one conductive finger, each of these conductive fingers being respectively connected to an emitter metallization, to a base metallization, and to a collector metallization.

8. A thyristor according to claim 1, successively comprising a first region of a first conductivity type, a second region of the second conductivity type, a third region of the first conductivity type, and fourth region of the second conductivity type, each of these regions extending across the entire substrate thickness, a conductive finger extending into the entire first region, at least one conductive finger extending into the entire second region, and at least one conductive finger extending into the entire fourth region.

9. The thyristor of claim 8, wherein the first conductivity type is type N and the second conductivity type is type P, the first region being a cathode region and the fourth region an anode region, and wherein localized metallizations extend vertically between the gate region and the cathode region to form localized gate-cathode short-circuits.